

**Before the  
Public Service Commission of South Carolina  
Docket No. 2019-4-G**

**Annual Review of Purchased Gas Adjustment and Gas Purchasing Policies  
of  
Piedmont Natural Gas Company, Inc.**

**Testimony  
of  
Sarah E. Stabley**

**On Behalf Of  
Piedmont Natural Gas Company, Inc.**



**May 30, 2019**

1 **Q. Please state your name and your business address.**

2 A. My name is Sarah E. Stabley. My business address is 4720 Piedmont Row  
3 Drive, Charlotte, North Carolina.

4 **Q. By whom and in what capacity are you employed?**

5 A. I am employed by Duke Energy Corporation (“Duke”) and work on behalf of  
6 Piedmont Natural Gas Company, Inc., (“Piedmont” or the “Company”), a  
7 wholly owned subsidiary of Duke, as the Managing Director of Gas Supply  
8 Optimization & Pipeline Services in Duke’s Natural Gas Business Unit.

9 **Q. Please describe your educational and professional background.**

10 A. I graduated from Queens University of Charlotte in May of 2004 with a  
11 Bachelor of Arts Degree in Business Administration. I joined the Company  
12 as a Collector/Meter Reader in our field operations in December of 1998. In  
13 March 2001 I took a position in Gas Control as a Schedule Confirmation  
14 Analyst. In November 2004 I was hired as a Gas Supply Representative in  
15 the Gas Supply department. In 2008 I was promoted to Manager of Gas  
16 Supply & Wholesale Marketing. In 2013 I was promoted to Director of Gas  
17 Supply, Scheduling & Optimization. In 2016 Piedmont was acquired by  
18 Duke. In 2018 I was promoted to Managing Director of Gas Supply  
19 Optimization & Pipeline Services and assumed additional responsibility for  
20 Pipeline Services.

21 **Q. Please describe the scope of your present responsibilities for the**  
22 **Company.**

1 A. My current major responsibilities include supervision of the procurement and  
2 optimization of pipeline transportation, storage, and supply assets, system  
3 demand forecasting, administration of the Company's approved Hedging  
4 Plan, and management of broker activity for Transportation Customers.

5 **Q. Have you previously testified before this Commission or any other**  
6 **regulatory authority?**

7 A. Yes. I have testified in SC Prudence Hearings in Docket Nos. 2012-4-G,  
8 2013-4-G, 2014-4-G, 2015-4-G, 2016-4-G, 2017-4-G, and 2018-4-G and in  
9 NC Annual Review of Gas Cost Docket Nos. G-9, Sub 633 in 2013, G-9, Sub  
10 653 in 2014, G-9, Sub 673 in 2015, G-9, Sub 690 in 2016, G-9, Sub 710 in  
11 2017, and G-9, Sub 727 in 2018.

12 **Q. What is the purpose of your testimony in this proceeding?**

13 A. My testimony will describe the Company's gas purchasing policies and  
14 hedging activity during the review period. This testimony is in response to  
15 the Commission's directive issued in Order No. 88-294 dated April 6, 1988  
16 requiring ". . . annual public hearings . . . to review the Company's . . . gas  
17 purchasing policies" and in response to the Commission's Order establishing  
18 pre-filing deadlines in this docket.

19 **Q. What is the period of review in this docket?**

20 A. The review period is April 1, 2018 through March 31, 2019.

21 **Q. Please explain the Company's gas purchasing policies.**

1 A. The Company has previously utilized and continues to maintain a “best cost”  
2 gas purchasing policy. This policy consists of five main components, 1) the  
3 price of the gas, 2) the security of the gas supply, 3) the flexibility of the gas  
4 supply, 4) gas deliverability, and 5) supplier relations. As all of these  
5 components are interrelated, we continue to weigh the relative importance of  
6 each of these factors when developing the overall gas supply portfolio to meet  
7 the needs of our customers.

8 **Q. Please describe each of the five components.**

9 A. 1) The “price of the gas” refers to the final cost of gas delivered to the  
10 Company’s city gates. The majority of the Company’s supply purchases take  
11 place at “pooling points” or at interconnects into the pipeline on which the  
12 Company holds firm transportation capacity rights. In the case of “bundled”  
13 city gate supply purchases, the Company may pay the gas supplier an all-  
14 inclusive price that covers the cost of gas, fuel and transportation charges.  
15 The use of storage services may add additional injection, withdrawal, and  
16 related fuel charges to the city gate cost of gas. In order to accurately assess  
17 prices at a comparable transaction point, the Company evaluates purchase  
18 prices at the receipt point and adds the applicable fuel and transportation costs  
19 associated with delivery to our pipeline city gate points.

20 2) “Security of gas supply” refers to the assurances that the supply of gas will  
21 be available when required. It is imperative to maintain a high level of supply  
22 security for the Company’s firm customers. Security of gas supply is less

1 important for our interruptible customers who have access to alternate fuels.  
2 Fixed supply reservation fees are generally required, in addition to the  
3 commodity cost of gas, in order to contract for and reserve firm gas supplies.  
4 In addition, the geographic source of supply, the nature of the supplier's  
5 portfolio of gas supplies, and negotiated contract terms must be considered  
6 when evaluating the level of supply security. Thus, the security of gas supply  
7 is interrelated with the price of gas as well as other components of the  
8 Company's "best cost" purchasing policy.

9 3) "Flexibility of gas supply" refers to our ability to adjust the volume of a  
10 particular supply contract as operating and market conditions change. For  
11 example, the demand of firm heat-sensitive customers will vary depending on  
12 the weather conditions. Interruptible customers will vary their level of  
13 purchases depending on the price of alternate fuels and the demand for  
14 product in their own industry. Thus, the Company must arrange a portfolio  
15 of gas supplies and storage services flexible enough to meet the daily and  
16 monthly "swings" in demand. Contractual "swing rights" are implemented  
17 through monthly and daily elections with gas suppliers and through injections  
18 into and withdrawals out of storage.

19 4) "Gas deliverability" refers to the ability to deliver the Company's gas  
20 supplies at the city gate through reliable transportation and storage capacity  
21 arrangements. The interstate pipeline industry has created a complex system  
22 of multiple pipeline services and storage service combinations.

1 Transportation arrangements can involve *intrastate* pipeline transportation,  
2 interstate pipeline transportation, interstate pipeline storage arrangements,  
3 interstate pipeline lateral lines, interstate pipeline pooling services, and  
4 interstate pipeline balancing and peaking services. The marketplace for  
5 pipeline capacity service is limited, with little to no unused capacity available  
6 during periods of high demand conditions such as extreme cold or hot weather  
7 conditions. Consequently, it is important that we secure and maintain firm  
8 transportation and storage capacity rights to ensure the deliverability of our  
9 gas supplies to meet the design day, seasonal, and annual needs of our  
10 customers. Pipeline transportation and storage capacity contracts require the  
11 payment of fixed demand charges to reserve firm transportation and/or  
12 storage entitlements. The Company is active in proceedings at the Federal  
13 Energy Regulatory Commission (“FERC”) not only with respect to the level  
14 of pipeline charges under these contracts, but also the tariff terms and  
15 conditions that apply to these pipeline services.

16 5) “Supplier relations” refers to the dependability, integrity and flexibility of  
17 a particular gas supplier. We contract with gas suppliers who have a  
18 reputation of honoring their contractual commitments and have proven  
19 themselves as reliable suppliers. Conversely, we avoid suppliers which have  
20 a reputation of defaulting on contract obligations or who unilaterally interpret  
21 contracts to their advantage. We prefer to deal with suppliers who are

1 constantly looking for ways to improve service and offer “win-win” solutions  
2 for meeting customer needs.

3 **Q. Please describe the arrangements under which the Company purchases**  
4 **gas.**

5 A. The Company purchases gas supplies under a diverse portfolio of contractual  
6 arrangements with a number of gas producers and marketers. In general,  
7 under the Company’s firm gas supply contracts, the Company may pay  
8 negotiated reservation fees for the right to reserve and call upon firm supply  
9 service up to the maximum daily contract quantity (elected either on a  
10 monthly or daily basis), with market-based commodity prices. These market-  
11 based commodity prices, to which the Company’s gas supply contracts refer,  
12 are published daily and monthly in industry trade publications. These firm  
13 contracts typically range in term from one month to four years. Some of these  
14 contracts are for winter only (peaking or seasonal) service, summer only  
15 (peaking or seasonal) service, or 365-day (annual) service. Firm gas supplies  
16 are purchased for reliability and security of service. The reservation fees  
17 associated with firm gas supplies may vary according to the amount of  
18 flexibility built into the contract, with daily swing service generally being  
19 more expensive than monthly baseload service. Generally, prior to or when  
20 existing supply contracts expire, requests for proposals (“RFPs”) may be sent  
21 to potential suppliers, their responses evaluated, and firm gas supplies are then

1 contracted with suppliers whose proposals best fulfill the Company's "best  
2 cost" purchasing policy.

3 The Company also purchases gas supplies in the spot market under contract  
4 terms of one month or less. These contracts provide less supply security and,  
5 as a result, the Company relies on these contracts primarily for interruptible  
6 or spot markets during off-peak periods when secondary supplies are more  
7 abundant and for supplemental system balancing requirements. Because of  
8 the nature of spot contracts, these supplies do not command reservation fees  
9 and are priced at a market rate, generally by reference to an industry index or  
10 at negotiated fixed prices.

11 **Q. How does the combination of the five factors described above determine**  
12 **the nature of the supply and capacity contracts under your "best cost"**  
13 **policy?**

14 A. Under our "best cost" policy, we secure and maintain a supply portfolio that  
15 is in balance with the requirements of our sales customers. Because our firm  
16 sales customers must have secure and reliable gas supply, we meet the need  
17 of our firm sales customers' demand primarily with long-term firm supply,  
18 transportation, storage, and peaking service contracts. The temperature  
19 sensitivity of our firm customers necessitates that flexibility of supply and  
20 storage also be provided. As mentioned earlier, firm gas supply contracts  
21 demand a premium, typically in the form of fixed reservation fees. Also, firm  
22 supply contracts with flexible swing service entitlements will command a

1 higher reservation fee than baseload arrangements. Because our interruptible  
2 customers are more price sensitive and require less supply security, we supply  
3 these customers with off-peak firm gas supply and transportation services  
4 when the firm customers' demand declines and through the purchase of gas  
5 supplies in the spot market.

6 In short, before entering into any agreement to purchase gas supply, pipeline  
7 transportation capacity, or storage capacity, we carefully consider the  
8 requirement for the supply and weigh the five "best cost" factors (price,  
9 security, deliverability, flexibility, and supplier relations). A great deal of  
10 judgment is required when weighing these factors and to help us exercise this  
11 judgment, we keep informed about all aspects of the natural gas industry. We  
12 intervene in all major FERC proceedings involving our pipeline transporters,  
13 stay in constant contact with our existing and potential suppliers, monitor gas  
14 prices on a real-time basis, subscribe to industry literature, follow supply and  
15 demand developments, and attend industry seminars.

16 **Q. What is your greatest challenge in applying your "best cost" gas**  
17 **purchasing policy?**

18 A. Since most major gas supply decisions require a considerable degree of  
19 planning and must be made a year or more in advance of service, our greatest  
20 challenge is dealing with future uncertainties in a dynamic global, national,  
21 and regional energy market. Future demand for gas is affected by economic  
22 conditions, customer conservation efforts, weather patterns, and regulatory

1 policies. In addition, the future availability and pricing of gas supplies will  
2 be affected by overall end-user demand, oil and gas exploration and  
3 development, pipeline expansion and storage projects, and regulatory policies  
4 and approvals.

5 **Q. Please explain the Company's position regarding the current U.S. supply**  
6 **situation.**

7 A. For much of the first decade of this Century, futures pricing of natural gas  
8 reflected by the NYMEX was extremely volatile. Peak pricing for futures  
9 contracts occurred in July 2008 when contracts for gas to be delivered during  
10 January 2009 sold for \$14.516 per dekatherm. Due to the significant  
11 quantities of shale gas that have become available to the market, the cost of  
12 gas in the production areas has declined dramatically. It is the Company's  
13 expectation that some volatility will remain in the physical markets,  
14 particularly related to force majeure type events, interstate pipeline capacity  
15 markets, and/or significant changes in supply and/or demand, but that the  
16 dramatic swings previously seen in the futures market are not likely to recur  
17 with the same regularity or intensity so long as shale gas supplies remain  
18 abundant and regulatory policies remain favorable for gas and oil exploration  
19 and development. Another factor to consider in the U.S. supply situation is  
20 the exportation of LNG. Approvals of LNG export terminals, applications for  
21 trade with Free Trade Agreement and non-Free Trade Agreement countries,  
22 and to what extent exportation may impact gas prices are being evaluated.

1 Nevertheless, market experts believe that future LNG exports would be  
2 adequately served by shale supplies and that while there is a reasonable  
3 expectation of an increase in gas costs, the anticipated effect is marginal.

4 **Q. Please explain the factors that the Company evaluates in determining the**  
5 **pricing basis for its gas supply contracts. Please discuss the various**  
6 **pricing alternatives available, such as fixed prices, monthly market**  
7 **indexing and daily spot market pricing and describe how supplier**  
8 **reservation charges and discounts or premiums from market prices enter**  
9 **into the evaluation.**

10 A. The Company has various pricing options available to it when developing its  
11 gas supply portfolio. These options include monthly market indexing, daily  
12 spot pricing, and fixed pricing. Pricing for gas contracted for a term of one  
13 month or longer generally refers to a monthly or daily index as published by  
14 industry trade publications. Prices for daily spot deals may refer to a daily  
15 index or be a negotiated fixed price.

16 The reservation fee the Company pays for each contract in its firm supply  
17 portfolio is dependent upon the pricing options chosen and the supply  
18 flexibility requirements associated with each contract. Reservation fees are  
19 generally lower for baseload supplies (purchased at a constant volume for the  
20 entire month, season or year) and higher if swing service is required.  
21 Reservation fees also vary depending on the type of swing service being  
22 provided. Examples of factors which affect the cost of swing service are: 1)

1 the number of days of swing required; 2) the volume of swing allowed; 3)  
2 commodity pricing at first of the month indices versus daily spot pricing; 4)  
3 next day versus intraday swing capabilities; and 5) location of the supply  
4 being purchased.

5 The Company considers its anticipated load and swing requirements under  
6 various demand scenarios, contemplates the factors listed above and makes a  
7 “best cost” purchasing decision.

8 **Q. Please describe how the Company determines the daily contract quantity**  
9 **of gas supplies that should be acquired through long-term contracts for**  
10 **the whole year, the full winter season and periods less than a full winter**  
11 **season.**

12 A. The Company purchases gas supplies on a year-round basis to fulfill its firm  
13 requirements including storage injections and to minimize supply costs  
14 utilized to serve firm customers. Some of these contracts will escalate in  
15 volume during shoulder months (April and October) and the winter period  
16 (November through March) as the Company’s firm requirements increase due  
17 to higher demand, thus sculpting year-round contracts to fit seasonal needs.  
18 The Company also purchases volumes for the winter period to meet its  
19 forecasted Sales customers’ demand within the limits of the Company’s firm  
20 transportation capacity entitlements, which increase during the winter period.  
21 In addition, the Company reviews low demand scenarios to measure its ability  
22 to fulfill its contractual purchase commitments with suppliers. Lastly, the

1 Company may purchase short-term city gate peaking supply to fulfill  
2 additional firm obligations that exceed the Company's firm transportation  
3 capacity entitlements.

4 **Q. What process does the Company employ in selecting its firm gas**  
5 **suppliers?**

6 A. The Company identifies the volume and type of supply that it needs to fulfill  
7 its customer demand requirements, and in general, solicits RFPs from a list of  
8 suppliers that the Company continuously updates as potential suppliers enter  
9 and leave the market place. The RFPs may be for firm baseload or swing  
10 supply. RFPs for swing supply may be further categorized into pricing based  
11 on first of the month indices or daily market indices. Swing supplies priced  
12 at first of the month indices command the highest reservation fees because the  
13 supplier assumes the risk associated with market volatility during the delivery  
14 period. Lower reservation fees are associated with swing contracts  
15 referencing a daily market index because both buyer and seller assume the  
16 risk of daily market volatility. After forecasting the ultimate cost delivered  
17 to the city gate for each point of supply (incorporating the forecasted cost at  
18 the supply point plus pipeline fuel plus pipeline transportation fees), and  
19 evaluating the cost of reservation fees associated with each type of supply and  
20 its corresponding bid, the Company makes a "best cost" decision on which  
21 type of supply and supplier is best suited to fulfill its needs.

1 **Q. Did the Company enter into any new supply arrangements during the**  
2 **review period?**

3 A. Yes, during the review period the Company added new supply arrangements.

4 **Q. Please describe the process that the Company utilized and the market**  
5 **intelligence evaluated during the review period to determine the prices**  
6 **charged for secondary market sales.**

7 A. The process and information used by the Company in pricing secondary  
8 market sales depends upon the location of the sale, term of the sale, the type  
9 of sale, and prevailing market conditions at the time of the sale. For long-  
10 term delivered sales (longer than one month), in general, the Company solicits  
11 bids from potential buyers, and if acceptable, evaluates and awards available  
12 volumes. For short-term transactions (daily or monthly), the Company 1)  
13 monitors prices and volumes on the Intercontinental Exchange  
14 (Intercontinental Exchange or "ICE" is an electronic trading platform where  
15 potential buyers post bids and potential sellers post offers at various  
16 locations/hubs along the interstate pipelines), 2) talks to various market  
17 participants, and 3) for less liquid trading points, estimates prices based on  
18 price relationships with more liquid points. The Company will also evaluate  
19 the amount of supply available for sale and weigh that against current market  
20 conditions in formulating its sales strategy (i.e., if the Company has a large  
21 amount of supply to sell on a particular day and determines that market  
22 demand is low, the Company will be more aggressive in its sales strategy).

1 The Company incorporates all these factors and then initiates its sales  
2 strategy.

3 **Q. Did the Company make any changes in its gas purchasing policies or**  
4 **practices during the review period?**

5 A. The Company did not implement any changes in its “best cost” gas purchasing  
6 policies or practices during the review period.

7 **Q. Did the Company take any other action to reduce price volatility for its**  
8 **customers?**

9 A. The Company continues to utilize the Company’s approved Hedging Plan as  
10 well as storage which acts as a physical hedge to stabilize cost. The  
11 Company’s Equal Payment Plan, in addition to the adjustment of the PGA  
12 benchmark price and deferred gas cost accounting, also provide a smoothing  
13 effect on gas prices charged to customers.

14 **Q. What were the net economic results of the Hedging Plan during the**  
15 **review period?**

16 A. The Company’s South Carolina customers incurred a net economic cost of  
17 \$134,015.50 (see **Exhibit\_\_ (MBT-2)**) as a result of the Company’s approved  
18 Hedging Plan during the review period which was a decrease compared to the  
19 last review period. This net economic impact includes the cost of  
20 commissions, software, subscriptions, and a data feed and amounts to an  
21 average cost per customer of roughly \$0.07 per month.

1 **Q. Did the Company's Hedging Plan work properly during the review**  
2 **period?**

3 A. Yes. The Hedging Plan accomplished its goal of providing an insurance  
4 policy to reduce gas cost volatility for customers in the event of a gas price  
5 fly up.

6 **Q. Has the Company made any changes to its Hedging Plan during the**  
7 **review period?**

8 A. There were no changes made to the Hedging Plan during the review period.  
9 The Company has and will continue to closely monitor the gas supply –  
10 demand picture and will propose changes it deems necessary to its Hedging  
11 Plan.

12 **Q. Please describe how compliance with the Hedging Plan is monitored.**

13 A. Currently, the Gas Accounting, Finance, and Corporate Compliance areas  
14 perform ongoing activities to monitor compliance with the Hedging Plan. In  
15 addition, the Company's Gas Market Risk Committee monitors compliance  
16 with the Hedging Plan, as well as considers and approves any change to the  
17 Hedging Plan. Periodic internal audits have and will be performed to ensure  
18 that controls continue to be adequate and function as management intends.

19 **Q. Have there been any deviations from the Hedging Plan during the review**  
20 **period?**

21 A. There were no deviations from the Hedging Plan during the review period.

1 **Q. Given the current low price forecast and low gas cost volatility**  
2 **environment, do you think continuing to hedge under the current**  
3 **Hedging Plan is prudent?**

4 A. Because the goal of the Hedging Plan is to provide insurance against gas cost  
5 volatility if prices fly up, the Company feels it is prudent to incur what it  
6 deems is a low-cost insurance policy and continue with the current Hedging  
7 Plan. As stated previously, the cost per customer during the review period  
8 was approximately \$0.07 per month. Because the current Hedging Plan only  
9 contemplates the purchase of options, the cost of the Hedging Plan is  
10 relatively low. As stated above, the Company has and will continue to closely  
11 monitor the gas supply – demand picture and will propose changes it deems  
12 necessary to its Hedging Plan.

13 **Q. What are some of the other steps the Company has taken to manage its**  
14 **gas costs consistent with its “best cost” policy during the review period?**

15 A. During the past year, the Company has taken the following additional steps  
16 to manage its gas costs, consistent with its “best cost” policy:

17 (1) The Company has, as more fully described in Ms. Raney’s  
18 testimony, actively participated in proceedings before the FERC and other  
19 regulatory agencies that could reasonably be expected to affect the  
20 Company’s rates and services;

21 (2) The Company has utilized the flexibility available within its  
22 supply and capacity contracts to purchase and dispatch gas, release capacity

1 and initiate secondary marketing sales in the most cost effective manner,  
2 resulting in secondary market credits of \$4,047,969.63 compared to last  
3 year's secondary market credits of \$5,767,899.67;

4 (3) The Company has actively promoted more efficient peak day use  
5 of natural gas and load growth from "year-round" markets in order to improve  
6 the Company's load factor and reduce average unit costs.

7 **Q. Please summarize your testimony.**

8 A. The Company's "best cost" purchasing policy provides ratepayers with secure  
9 and reasonably priced gas supplies to meet the requirements of its customers.  
10 This policy and the Company's practice under this policy have been reviewed  
11 and found prudent on all occasions in South Carolina and in the other state  
12 jurisdictions in which we operate. Although we believe our policies and  
13 procedures are reasonable, we are cognizant of the fact that the natural gas  
14 industry is rapidly changing, and we are continuously monitoring our policies  
15 and procedures to keep up with, and anticipate, these changing conditions.  
16 We have and will continue to work with the Commission and ORS Staff to  
17 review current regulations and tariffs and explore possible changes that will  
18 better serve our natural gas customers in the future. We are satisfied that our  
19 existing policies and procedures are prudent and that they have produced and  
20 will continue to produce adequate amounts of secure and reasonably priced  
21 gas for our customers.

22 **Q. Does this conclude your testimony?**

1 | A. Yes.